

(FILE 'HOME' ENTERED AT 14:59:34 ON 07 JAN 2003)

FILE 'MEDLINE, CANCERLIT, EMBASE, BIOTECHDS, BIOSIS' ENTERED AT 15:02:28  
ON 07 JAN 2003

L1	104224	S	EQUINE OR HORSE
L2	4734	S	DNA VACCINE
L3	59	S	L1 AND L2
L4	33	DUP REM	L3 (26 DUPLICATES REMOVED)
L5	337310	S	HIV-1 OR HIV
L6	0	S	AVIAN IMMUNODEFIC?
L7	1	S	AVIAN IMMUNODEFIC?
L8	3374	S	FELINE IMMUNODEFIC?
L9	21	S	L8 AND L2
L10	14	DUP REM	L9 (7 DUPLICATES REMOVED)

L4 ANSWER 32 OF 33 MEDLINE DUPLICATE 11  
 AN 97414204 MEDLINE  
 DN 97414204 PubMed ID: 9269061  
 TI Immunogenicity and efficacy of baculovirus-expressed and DNA-based  
**equine** influenza virus hemagglutinin vaccines in mice.  
 AU Olsen C W; McGregor M W; Dybdahl-Sissoko N; Schram B R; Nelson K M; Lunn D  
 P; Macklin M D; Swain W F; Hinshaw V S  
 CS Department of Pathobiological Science, School of Veterinary Medicine,  
 University of Wisconsin-Madison 53706, USA.  
 SO VACCINE, (1997 Jul) 15 (10) 1149-56.  
 Journal code: 8406899. ISSN: 0264-410X.  
 CY ENGLAND: United Kingdom  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 OS GENBANK-U58195  
 EM 199710  
 ED Entered STN: 19971105  
 Last Updated on STN: 19971105  
 Entered Medline: 19971020  
 AB Two fundamentally different approaches to vaccination of BALB/c mice with  
 the hemagglutinin (HA) of A/**Equine**/Kentucky/1/81 (H3N8) (Eq/KY)  
 were evaluated, that is, administration of HA protein vs administration of  
 HA-encoding DNA. Each vaccine was tested for its immunogenicity and  
 ability to provide protection from homologous virus challenge. HA protein  
 was synthesized in vitro by infection of Sf21 insect cells with a  
 recombinant baculovirus. Intranasal administration of this vaccine induced  
 virus-specific antibodies, as measured by enzyme-linked immunosorbent  
 assay (ELISA), but did not induce virus neutralizing (VN) antibodies. This  
 route of administration provided partial protection from virus challenge,  
 but interestingly, this protection was completely abrogated, rather than  
 enhanced, by co-administration of 10 micrograms of cholera holotoxin. As a  
 second approach, mice were directly vaccinated in vivo by Accell gene gun  
 delivery of plasmid DNA encoding the Eq/KY HA gene. This approach induced  
 VN antibodies as well as virus-specific ELISA antibodies. When two doses  
 of **DNA vaccine** were administered 3 weeks apart, mice  
 were not protected from challenge, although they cleared the infection  
 more rapidly than control mice. However, when the second DNA vaccination  
 was delayed until 9 weeks after the first, 9 out of 10 vaccinated mice  
 were completely protected. These results indicate that the time between  
 initial and booster DNA vaccinations may be an important variable in  
 determining DNA vaccination efficacy.

L4 ANSWER 31 OF 33 MEDLINE DUPLICATE 10  
 AN 1998105827 MEDLINE  
 DN 98105827 PubMed ID: 9445082  
 TI Coadministration of DNA encoding interleukin-6 and hemagglutinin confers protection from influenza virus challenge in mice.  
 AU Larsen D L; Dybdahl-Sissoko N; McGregor M W; Drape R; Neumann V; Swain W F; Lunn D P; Olsen C W  
 CS Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison, 53706, USA.  
 SO JOURNAL OF VIROLOGY, (1998 Feb) 72 (2) 1704-8.  
 Journal code: 0113724. ISSN: 0022-538X.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199802  
 ED Entered STN: 19980226  
 Last Updated on STN: 19980226  
 Entered Medline: 19980218  
 AB This study was conducted to investigate whether Accell gene gun coadministration of DNA encoding human interleukin-6 (IL-6) would enhance protective immune responses in mice to an **equine** influenza A virus hemagglutinin (HA) **DNA vaccine**. Mice that received HA DNA alone exhibited accelerated clearance of homologous challenge virus but were not protected from infection. In contrast, mice that received both HA and IL-6 DNA had no detectable virus in their lungs after challenge. These results strongly support the use of IL-6 as a cytokine adjuvant in DNA vaccination.

and showed reduced lung pathology, in comparison to control mice.

L4 ANSWER 28 OF 33 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.  
AN 1999419590 EMBASE  
TI Immunization of animals: From DNA to the dinner plate.  
AU Babiuk L.A.; Van Drunen Littel-van den Hurk S.; Babiuk S.L.  
CS L.A. Babiuk, Veterinary Infectious Disease Org., University of  
Saskatchewan, 120 Veterinary Road, Saskatoon, Sask. S7N 5E3, Canada  
SO Veterinary Immunology and Immunopathology, (1999) 72/1-2 (189-202).

Refs: 65

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PUI S 0165-2427(99)00132-4

CY Netherlands

DT Journal; Article

FS 022 Human Genetics

026 Immunology, Serology and Transplantation

037 Drug Literature Index

LA English

SL English

AB Recently, there has been a great deal of interest in polynucleotide vaccination also referred to as DNA vaccines or genetic immunization for inducing long-term immunity in various animals and humans. The main attraction of this technology is the possibility to induce a broad range of immune responses without the use of conventional adjuvants. To date, most of the studies (>500 reports) have focused on DNA vaccination in mice. The present report summarizes the limited number of trials that have used target animal species to not only test the immune responses but also correlate them to protection.